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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,976	12/13/2001	Michael Salvatore Ferritto	DC4979	8374

7590

03/31/2003

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EXAMINER

ROBERTSON, JEFFREY

ART UNIT

PAPER NUMBER

1712

1

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/017,976

Applicant(s)

FERRITTO ET AL.

Examiner

Jeffrey B. Robertson

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 8-23 have been renumbered as 5-20. The original claims as presented did not contain any claims numbered 5-7.

### ***Specification***

2. The disclosure is objected to because of the following informalities: in paragraphs [0014] and [0020], what is the definition of oxygen radicals (O)? Does this fall within the definition of F or are oxygen radicals meant to be a separate definition of Y? Applicant provides no further definition in the specification. In paragraph [0040], what is the compound "aaa-trifluoro-m-toluidine"? The examiner does not understand the meaning of the "aaa" notation.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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5. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 1 and 20 recite the broad recitation "functional group that reacts with epoxy-functional groups" in the definition of Z', and the claims also recite "(i.e. amine, hydroxyl)", which is the narrower statement of the range/limitation.

In addition, for claims 1 and 20, the definition of "oxygen radical" is not known.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claims 1, 2, 4, 5, 7-13, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Spyropoulos et al. (U.S. Patent No. 5,017,297).

For claims 1, 11, and 20, in column 2, line 57 through column 3, line 68, Spyropoulos teaches microemulsions where an amino functional siloxane is reacted with an epoxy functional silane, where a surfactant (emulsifying agent (II)) and an emulsion liquid (continuous water phase (III)) are added. In column 2, lines 45-47, Spyropoulos discloses that microemulsions have a particle size of less than 0.14 ppm. In column 5, lines 9-12, Spyropoulos teaches that an active ingredient, such as a biocide may be added to the emulsion. For claims 2, 4, and 5, in Example 1, column 7, lines 1-20, Spyropoulos teaches an amino-functional polydimethylsiloxane where there are at least two Z' groups in the form of  $-(CH_2)_2NH(CH_2)_3NH_2$  groups and where R' is methyl. It is noted that the R' groups are more than 50 mol% of the Y groups in the siloxane. Here, Spyropoulos discloses that applicant's component (II) is an epoxy silane and therefore contains a Z group. For claims 10, 12, and 19, the reaction takes place at 90°C, which is within the range claimed by applicant and the resulting siloxane is present in 15% of the composition, where water has been added to account for between 1 and 99.8% of the composition.

For claims 7-9, in column 3, line 68, through column 4, line 4, Spyropoulos teaches that the ratio of R'(amino) to R (epoxy) is larger than 1/1. For claims 8 and 9 specifically, Spyropoulos teaches in Example 2, column 7, lines 21-30, that enough epoxy silane is provided to react with 33% of the available NH groups, which is within the ranges specified in those claims.

For claim 13, in column 5, lines 2-5, Spyropoulos teaches that the amount of surfactant is preferably between 20-40 parts by weight of component (I), which would result in an amount of between 0.1 to 40 wt. % of the composition.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spyropoulos (U.S. Patent No. 5,017,297) as applied to claim 1 above.

For claim 14, Spyropoulos teaches the limitations of claim 1 as outlined above. Spyropoulos fails to teach that the amount of active ingredient is between 10 and 50 wt. % of the composition. It would have been obvious to one of ordinary skill in the art to add the active ingredient in an amount within this range. The amount of active ingredient is a result effective variable depending on the end application. For example, if softener is to be added as an active ingredient, the desired softness of the resulting fabric would determine how much softener to add. A result effective variable is determined according to the desired properties of the resulting composition and would be obvious to one of ordinary skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

***Allowable Subject Matter***

10. Claims 3, 6, and 15-18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Spyropoulos fails to teach or suggest that the siloxane oligomer or polymer may contain the epoxy group and component (II) may contain the amino group. Spyropoulos does not teach or suggest the use of the emulsion in personal care compositions and thus does not teach active ingredients such as sunscreens or fragrances. Spyropoulos also does not teach that the active ingredient reacts with the siloxane or silane.

**Conclusion**

11. The international search report included with the information disclosure statement (paper no. 3) lists EP 0 893 467 A and WO 95 35183 A as X references. However, neither reference appears to teach the required epoxy functionality present on the siloxane or crosslinker.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dalle et al. (U.S. Patent No. 6,248,855), Hill et al. (U.S. Patent No. 5,665,804) and GB 1,296,136 are cited for being of general interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (703) 306-5929. The examiner can normally be reached on Mon-Fri 7:00-3:00.

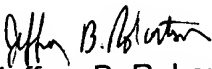
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Dawson can be reached on (703) 308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



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Jeffrey B. Robertson  
Examiner  
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JBR  
March 24, 2003